

In the Claims:

Please cancel claims 1-37 without prejudice or disclaimer.

Please add the following new claims 38-210.

- ~~38.~~ (New) An isolated peptide less than 15 amino acids in length comprising an oligopeptide selected from the group consisting of:
- VSHSFPHPLY (SEQ ID NO:234)
- LTAAH CIRNK (SEQ ID NO:1243) and
- YTKVVHYRK (SEQ ID NO:1375).
39. (New) The peptide of claim 38, which comprises VSHSFPHPLY (SEQ ID NO:234).
40. (New) The peptide of claim 38, which comprises LTAAH CIRNK (SEQ ID NO:1243).
41. (New) The peptide of claim 38, which comprises YTKVVHYRK (SEQ ID NO:1375).
42. (New) The peptide of claim 38 which is 11 amino acids in length.
43. (New) The peptide of claim 38 which is 10 amino acids in length.
44. (New) The peptide of claim 38 which is 9 amino acids in length.
45. (New) The peptide of claim 38, which is fused to a T helper peptide.
46. (New) The peptide of claim 38, which is fused to spacer or linker amino acids.
47. (New) The peptide of claim 38, which is fused to a carrier.
48. (New) The peptide of claim 38, which is linked to a lipid.
49. (New) A fusion protein comprising the peptide of claim 38.
50. (New) A homopolymer of the peptide of claim 38.

51. (New) A heteropolymer of the peptide of claim 38 and a different peptide.
52. (New) A composition comprising the peptide of claim 38 and a carrier.
53. (New) A pharmaceutical composition comprising the peptide of claim 38 and a carrier.
54. (New) A composition comprising the peptide of claim 38 and a liposome.
55. (New) A vaccine comprising the peptide of claim 38 and a pharmaceutically acceptable carrier.
56. (New) A composition comprising the peptide of claim 38, and one or more second peptides.
57. (New) The composition of claim 56, wherein said peptides form a fusion protein.
58. (New) The composition of claim 56, which comprises a carrier.
59. (New) A pharmaceutical composition comprising the composition of claim 56 and a carrier.
60. (New) The composition of claim 56, wherein said peptides are fused by spacer or linker amino acids.
61. (New) A vaccine comprising the composition of claim 56 and a pharmaceutically acceptable carrier.
62. (New) An isolated peptide less than 15 amino acids in length comprising an oligopeptide selected from the group consisting of:

LSELSLLSLY (SEQ ID NO:127)

ASCHLTELY (SEQ ID NO:9)

KGEYFVEMYY (SEQ ID NO:3431)

LYCESVHNF (SEQ ID NO:1732)

PYKDFIATL (SEQ ID NO:1815)

LYFEKGEYF (SEQ ID NO:1736)

ATQIPSYKK (SEQ ID NO:1111) and

SLYTKVVHYR (SEQ ID NO:1319).

63. (New) The peptide of claim 62, which comprises LSELSLLSLY (SEQ ID NO:127).

64. (New) The peptide of claim 62, which comprises ASCHLTELY (SEQ ID NO:9).

65. (New) The peptide of claim 62, which comprises KGEYFVEMY (SEQ ID NO:5431).

66. (New) The peptide of claim 62, which comprises LYCESVHNF (SEQ ID NO:1732).

67. (New) The peptide of claim 62, which comprises PYKDFIATL (SEQ ID NO:1815).

68. (New) The peptide of claim 62, which comprises LYFEKGEYF (SEQ ID NO:1736).

69. (New) The peptide of claim 62, which comprises ATQIPSYKK (SEQ ID NO:1111).

70. (New) The peptide of claim 62, which comprises SLYTKVVHYR (SEQ ID NO:1319).

71. (New) The peptide of claim 62 which is 11 amino acids in length.

72. (New) The peptide of claim 62 which is 10 amino acids in length.

73. (New) The peptide of claim 62 which is 9 amino acids in length.
74. (New) The peptide of claim 62, which is fused to a T helper peptide.
75. (New) The peptide of claim 62, which is fused to spacer or linker amino acids.
76. (New) The peptide of claim 62, which is fused to a carrier.
77. (New) The peptide of claim 62, which is linked to a lipid.
78. (New) A fusion protein comprising the peptide of claim 62.
79. (New) A homopolymer of the peptide of claim 62.
80. (New) A heteropolymer of the peptide of claim 62 and a different peptide.
81. (New) A composition comprising the peptide of claim 62 and a carrier.
82. (New) A pharmaceutical composition comprising the peptide of claim 62 and
a carrier.
83. (New) A composition comprising the peptide of claim 62 and a liposome.
84. (New) A vaccine comprising the peptide of claim 62 and a pharmaceutically
acceptable carrier.
85. (New) A composition comprising the peptide of claim 62, and one or more
second peptides.
86. (New) The composition of claim 85, wherein said peptides form a fusion
protein.
87. (New) The composition of claim 85, which comprises a carrier.
88. (New) A pharmaceutical composition comprising the composition of claim 85
and a carrier.
89. (New) The composition of claim 85, wherein said peptides are fused by spacer
or linker amino acids.

90. (New) A vaccine comprising the composition of claim 85 and a pharmaceutically acceptable carrier

91. (New) An isolated peptide less than 15 amino acids in length comprising an oligopeptide selected from the group consisting of:

FLTPKKLQCV (SEQ ID NO:6855) and

KLQCVDLHV (SEQ ID NO:6856).

92. (New) The peptide of claim 91, which comprises FLTPKKLQCV (SEQ ID NO:6855).

93. (New) The peptide of claim 91, which comprises KLQCVDLHV (SEQ ID NO:6856).

94. (New) The peptide of claim 91 which is 11 amino acids in length.

95. (New) The peptide of claim 91 which is 10 amino acids in length.

96. (New) The peptide of claim 91 which is 9 amino acids in length.

97. (New) The peptide of claim 91, which is fused to a T helper peptide.

98. (New) The peptide of claim 91, which is fused to spacer or linker amino acids.

99. (New) The peptide of claim 91, which is fused to a carrier.

100. (New) The peptide of claim 91, which is linked to a lipid.

101. (New) A fusion protein comprising the peptide of claim 91.

102. (New) A homopolymer of the peptide of claim 91.

103. (New) A heteropolymer of the peptide of claim 91 and a different peptide.

104. (New) A composition comprising the peptide of claim 91 and a carrier.

105. (New) A pharmaceutical composition comprising the peptide of claim 91 and

a carrier.

106. (New) A composition comprising the peptide of claim 91 and a liposome.
107. (New) A vaccine comprising the peptide of claim 91 and a pharmaceutically acceptable carrier.
108. (New) A composition comprising the peptide of claim 91, and one or more second peptides.
109. (New) The composition of claim 108, wherein said peptides form a fusion protein.
110. (New) The composition of claim 108, which comprises a carrier.
111. (New) A pharmaceutical composition comprising the composition of claim 108 and a carrier.
112. (New) The composition of claim 108, wherein said peptides are fused by spacer or linker amino acids.
113. (New) A vaccine comprising the composition of claim 108 and a pharmaceutically acceptable carrier.
114. (New) An isolated peptide less than 15 amino acids in length comprising an oligopeptide selected from the group consisting of:

HSFPHPLY (SEQ ID NO:92)

ALGTTCYA (SEQ ID NO:6853)

VLAKELKFV (SEQ ID NO:6827)

ILLWQPIPV (SEQ ID NO:6831)

IMYSAHDTTV (SEQ ID NO:6836) and

LLFFWLDRSV (SEQ ID NO:6825).

115. (New) The peptide of claim 114, which comprises HSFPHPLY (SEQ ID NO:92).
116. (New) The peptide of claim 114, which comprises ALGTTCYA (SEQ ID NO:6853).
117. (New) The peptide of claim 114, which comprises VLAKELKFV (SEQ ID NO:6827).
118. (New) The peptide of claim 114, which comprises ILLWQPIPV (SEQ ID NO:6831).
119. (New) The peptide of claim 114, which comprises IMYSAHDTTV (SEQ ID NO:6836).
120. (New) The peptide of claim 114, which comprises LLFFWLDRSV (SEQ ID NO:6825).
121. (New) The peptide of claim 114 which is 11 amino acids in length.
122. (New) The peptide of claim 114 which is 10 amino acids in length.
123. (New) The peptide of claim 114 which is 9 amino acids in length.
124. (New) The peptide of claim 114, which is fused to a T helper peptide
125. (New) The peptide of claim 114, which is fused to spacer or linker amino acids.
126. (New) The peptide of claim 114, which is fused to a carrier.
127. (New) The peptide of claim 114, which is linked to a lipid.
128. (New) A fusion protein comprising the peptide of claim 114.
129. (New) A homopolymer of the peptide of claim 114.
130. (New) A heteropolymer of the peptide of claim 114 and a different peptide.
131. (New) A composition comprising the peptide of claim 114 and a carrier.

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132. (New) A pharmaceutical composition comprising the peptide of claim 114 and a carrier.

133. (New) A composition comprising the peptide of claim 114 and a liposome.

134. (New) A vaccine comprising the peptide of claim 114 and a pharmaceutically acceptable carrier.

135. (New) A composition comprising the peptide of claim 114, and one or more second peptides.

136. (New) The composition of claim 135, wherein said peptides form a fusion protein.

137. (New) The composition of claim 135, which comprises a carrier.

138. (New) A pharmaceutical composition comprising the composition of claim 135 and a carrier.

139. (New) The composition of claim 135, wherein said peptides are fused by spacer or linker amino acids.

140. (New) A vaccine comprising the composition of claim 135 and a pharmaceutically acceptable carrier.

141. (New) An isolated peptide less than 15 amino acids in length comprising an oligopeptide selected from the group consisting of:

HPLYDMSLL (SEQ ID NO:2128)
FPHPLYDMSL (SEQ ID NO:2108)
SLLSLYGIHK (SEQ ID NO:1312)
HYTELYFEK (SEQ ID NO:1195)
NPILLWQPI (SEQ ID NO:21114)
IPSYKKLIM (SEQ ID NO:2146) and
CPLERFAEL (SEQ ID NO:2070).

142. (New) The peptide of claim 141, which comprises HPLYDMSLL (SEQ ID NO:2128).
143. (New) The peptide of claim 141, which comprises FPHPLYDMSL (SEQ ID NO:2108).
144. (New) The peptide of claim 141, which comprises SLLSLYGIHK (SEQ ID NO:1312).
145. (New) The peptide of claim 141, which comprises HLTELYFEK (SEQ ID NO:1195).
146. (New) The peptide of claim 141, which comprises NPILLWQPI (SEQ ID NO:21141).
147. (New) The peptide of claim 141, which comprises IPSYKKLIM (SEQ ID NO:2146).
148. (New) The peptide of claim 141, which comprises CPLERFAEL (SEQ ID NO:2070).
149. (New) The peptide of claim 141 which is 11 amino acids in length.
150. (New) The peptide of claim 141 which is 10 amino acids in length.
151. (New) The peptide of claim 141 which is 9 amino acids in length.
152. (New) The peptide of claim 141, which is fused to a T helper peptide.
153. (New) The peptide of claim 141, which is fused to spacer or linker amino acids.
154. (New) The peptide of claim 141, which is fused to a carrier.
155. (New) The peptide of claim 141, which is linked to a lipid.
156. (New) A fusion protein comprising the peptide of claim 141.
157. (New) A homopolymer of the peptide of claim 141.
158. (New) A heteropolymer of the peptide of claim 141 and a different peptide.

159. (New) A composition comprising the peptide of claim 141 and a carrier.
160. (New) A pharmaceutical composition comprising the peptide of claim 141 and a carrier.
161. (New) A composition comprising the peptide of claim 141 and a liposome.
162. (New) A vaccine comprising the peptide of claim 141 and a pharmaceutically acceptable carrier.
163. (New) A composition comprising the peptide of claim 141, and one or more second peptides.
164. (New) The composition of claim 163, wherein said peptides form a fusion protein.
165. (New) The composition of claim 163, which comprises a carrier.
166. (New) A pharmaceutical composition comprising the composition of claim 163 and a carrier.
167. (New) The composition of claim 163, wherein said peptides are fused by spacer or linker amino acids.
168. (New) A vaccine comprising the composition of claim 163 and a pharmaceutically acceptable carrier.
169. (New) An isolated peptide less than 15 amino acids in length comprising an oligopeptide consisting of HPQWVLTAA (SEQ ID NO:2140).
170. (New) The peptide of claim 169, which is 11 amino acids in length.
- (New) The peptide of claim 169, which is 10 amino acids in length.
- (New) The peptide of claim 169, which is 9 amino acids in length.

173. (New) The peptide of claim 169, which is fused to a T helper peptide.
174. (New) The peptide of claim 169, which is fused to spacer or linker amino acids.
175. (New) The peptide of claim 169, which is fused to a carrier.
176. (New) The peptide of claim 169, which is linked to a lipid.
177. (New) A fusion protein comprising the peptide of claim 169.
178. (New) A homopolymer of the peptide of claim 169.
179. (New) A heteropolymer of the peptide of claim 169 and a different peptide.
180. (New) A composition comprising the peptide of claim 169 and a carrier.
181. (New) A pharmaceutical composition comprising the peptide of claim 169 and a carrier.
182. (New) A composition comprising the peptide of claim 169 and a liposome.
183. (New) A vaccine comprising the peptide of claim 169 and a pharmaceutically acceptable carrier.
184. (New) A composition comprising the peptide of claim 169, and one or more second peptides.
185. (New) The composition of claim 185, wherein said peptides form a fusion protein.
186. (New) The composition of claim 185, which comprises a carrier.
187. (New) A pharmaceutical composition comprising the composition of claim 185 and a carrier.
188. (New) The composition of claim 185, wherein said peptides are fused by spacer or linker amino acids.

189. (New) A vaccine comprising the composition of claim 185 and a pharmaceutically acceptable carrier.
190. (New) An isolated peptide less than 15 amino acids in length comprising an oligopeptide consisting of TLMSAMTNL (SEQ ID NO:6828).
191. (New) The peptide of claim 190, which is 11 amino acids in length.
192. (New) The peptide of claim 190, which is 10 amino acids in length.
193. (New) The peptide of claim 190, which is 9 amino acids in length.
194. (New) The peptide of claim 190, which is fused to a T helper peptide.
195. (New) The peptide of claim 190, which is fused to spacer or linker amino acids.
196. (New) The peptide of claim 190, which is fused to a carrier.
197. (New) The peptide of claim 190, which is linked to a lipid.
198. (New) A fusion protein comprising the peptide of claim 190.
199. (New) A homopolymer of the peptide of claim 190.
200. (New) A heteropolymer of the peptide of claim 190 and a different peptide.
201. (New) A composition comprising the peptide of claim 190 and a carrier.
202. (New) A pharmaceutical composition comprising the peptide of claim 190 and a carrier.
203. (New) A composition comprising the peptide of claim 190 and a liposome.
204. (New) A vaccine comprising the peptide of claim 190 and a pharmaceutically acceptable carrier.
205. (New) A composition comprising the peptide of claim 190, and one or more second peptides.

206. (New) The composition of claim 205, wherein said peptides form a fusion protein.
207. (New) The composition of claim 205, which comprises a carrier.
208. (New) A pharmaceutical composition comprising the composition of claim 205 and a carrier.
209. (New) The composition of claim 205, wherein said peptides are fused by spacer or linker amino acids.
210. (New) A vaccine comprising the composition of claim 205 and a pharmaceutically acceptable carrier.
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